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## Low Protein for Growing-Finishing Swine

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12. Do not overuse bulls, especially young ones, and check bulls frequently in pasture situations for early detection of injuries which may impair their breeding ability.

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# Low Protein For Growing-Finishing Swine

by  
Mr. Palmer J. Holden\*

During the last summer many pork producers were looking for ways to lower their feed costs. Those feeding a complete supplement probably ran into some problems if they eliminated or severely reduced the supplement without replacing the vitamins and minerals, particularly calcium and phosphorous. In addition to reduced growth rate efficiency they may even have experienced poor bone development or possible fractures.

Producers who reduced only protein but kept vitamin and mineral content at recommended levels may have observed no problems or only a depression in growth and efficiency depending on the severity of protein restriction.

A report on the effects of reduced protein intake was presented at the recent Pork Producers Day held at Iowa State University. Four rations, adequate in vitamins and minerals, were used. They contained 0, 100, 200 or 300 pounds of soybean

meal (SBM) per ton and calculated 8.6, 10.6, 12.6 and 14.6 percent protein. The performance of the pigs is shown in the accompanying table.

Growing pigs received rations with 100, 200 or 300 pounds of SBM. Daily gain and efficiency were very poor on the lower protein ration but performance on the 200 and 300 pound level of SBM was very similar. The same trend was observed for the finishing pigs.

Normal protein recommendations for growing and finishing pigs range from 13-16 percent. But during periods of high protein costs it is often cheaper to put weight on a hog by feeding a lower protein, cheaper ration, even though he may gain less efficiently and grow a little slower. It is essential to the health and well-being of the pig to maintain the vitamins and minerals at recommended levels.

Nutrient recommendations are available in extension bulletin PM-489, "Life Cycle Swine Nutrition," which is available at no charge from Publications Distribution, Iowa State University, Ames, Ia.

Mr. Holden is the extension Swine Specialist at Iowa State University.

Performance of Pigs Fed Varying Protein Levels

Protein level, %	Growing Pigs			Finishing Pigs		
	10.6	12.6	14.6	8.6	10.6	12.6
Initial wt., lbs.	49.9	48.8	48.1	127.2	126.3	126.2
Final wt., lbs.	99.9	135.1	135.0	174.7	205.9	219.1
Av. Daily Gain, lbs.	0.86	1.49	1.51	0.86	1.45	1.60
Feed/Gain	4.52	3.24	2.97	6.42	4.43	3.99